Patent Claims

1. Flowable fibrin adhesive granulate, characterized in that it has granulate pellets with a particle size of over 50 to approximately 1000 µm which contain thrombin, Factor XIII, fibrinogen and a calcium salt.

2. Fibrin adhesive granulate in accordance with claim 1, characterized in that the granulate pellets have a particle size of 100 to 200 µm.

3. Fibrin adhesive granulate in accordance with claims 1 and 2, characterized in that it also contains albumin, fibronectin, and/or other substances that promote wound healing.

4. Effervescent granulate or effervescent powder to generate a foam suitable for hemostasis, characterized in that in addition to the flowable fibrin adhesive granulate of claims 1 to 3, it also contains the substances required for the formation of CO_2.

5. Effervescent granulate or effervescent powder in accordance with claim 4, characterized in that it contains a mixture of a carbonate and a physiologically safe organic acid for the formation of CO_2.

6. Preparation to arrest bleeding, characterized in that it contains a wound care fleece comprised of a biodegradable support medium which is coated with a flowable fibrin adhesive granulate of the claims 1 to 3.

7. Preparation in accordance with claim 6, characterized in that the wound care fleece is coated with a hydrophilic, non-aqueous salve base and that the fibrin adhesive of claims 1 to 3 is embedded in said salve base.

8. Wound care fleece in accordance with claims 6 and 7, characterized in that the biodegradable support medium is comprised of natural or chemically modified collagen, keratin, gelatin, carbohydrates or cellulose derivatives.

9. Wound care fleece in accordance with claims 6 and 7, characterized in that the biodegradable support medium is comprised of a polymer from the group of the polyhydroxy carboxylic acids, the polyesters, the polycyano acrylates, the polyamino acids, the polyalcohols or the silicones.

10. Wound care fleece in accordance with claims 6 to 9, characterized in that it contains fibrinogen in a quantity of 0.05 to 50 mg/cm^2 and thrombin in a quantity of 1 µg to 20 mg/cm^2.

11. Wound care fleece in accordance with claims 6 to 10, characterized in that the preparation containing the fibrin adhesive is applied to one or both sides of the support medium.

12. Bandage, characterized in that it is coated with a wound care fleece in accordance with claims 6 to 11 at the location that will be applied to the bleeding wound.

13. Plaster, characterized in that it is comprised of a water-proof or water-permeable surface material that is coated with a would care fleece in accordance with claims 6 to 11 at the location that will be applied to the bleeding wound and has adhesive surfaces at the edges.

14. Preparation to arrest bleeding, characterized in that it is comprised of a hydrophilic, non-aqueous salve base into which the particles of a fibrin adhesive in accordance with claims 1 to 3 are embedded.

15. Method for the preparation of the fibrin adhesive granulate in accordance with claims 1 to 3, characterized in that all components of the fibrin adhesive are suspended in an organic solvent and are spray-dried in an evacuatable container by means of a fluidization gas in the fluidized bed up to a particle size of more than 50 to 1000 µm, preferably 100 to 200 µm.

16. Method in accordance with claim 15, characterized in that it is prepared with or without a support medium placed into the container as receiver.

17. Method for the preparation of a fibrin adhesive in accordance with claims 1 to 3, characterized in that a fibrinogen granulate is prepared first, and that a suspension of an organic solvent containing thrombin is sprayed onto said fibrinogen granulate, whereby a calcium salt is added either to the fibrinogen granulate or to the thrombin solution.

18. Method for the preparation of a fibrin adhesive granulate in accordance with claims 1 to 3, characterized in that the separately prepared fibrinogen- and thrombin granulate pellets, each of which have a particle size of more than 50 µm to approximately 1000 µm, are mixed with one another.

19. Method for preparing a preparation in accordance with claims 6 to 14, characterized in that the fibrin adhesive, which is available as a granulate mixture or as mixed granulate, is layered on a biodegradable support medium.

20. Method for preparing the preparation in accordance with claim 14, characterized in that a fibrin adhesive that is available as a granulate mixture or as mixed granulate is impasted with the hydrophilic, non-aqueous salve base.

21. Method for preparing a preparation in accordance with claims 6 to 14, characterized in that other biological, vegetable or synthetic active substances such as immunoglobulins, chemotherapeutics or antibiotics, which promote wound healing, are added to the fibrin adhesive granulate.

22. Use of a fibrin adhesive granulate in accordance with claims 1 to 5 or a preparation in accordance with claims 6 to 14, characterized in that it is used for wound healing in surgery, tissue therapy, and/or as support medium for biological factors.

23. Use of the wound care fleece, the bandage, the plaster or the salve or gel-type preparation in accordance with claims 6 to 14 for the hemostasis of interior or exterior wounds.

24. Use of an effervescent granulate or an effervescent powder in accordance with claims 4 and 5 for the preparation of an effervescent pressed tablet.

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